

Application No. 09/929,210
Attorney Docket No. 13031US01

REMARKS

The present application includes claims 1-50. Claims 1-28 have been allowed. Claims 32-50 were objected to by the Examiner because of two claims having claim number 32. Claims 30-32, 35-40, and 42-45, 46, and 47 were objected to as being dependent on a rejected base claim, but would be allowable if rewritten in independent form. Claims 29, 33, 34, 41, and 48-51 were rejected.

With regard to the Examiner's objection to claims 32-50, as noted by the Examiner, the previous claims included two claims numbered as claim 32. By this Amendment, both claims numbered as claim 32 have been canceled. New claims 51 and 52 have been introduced that are identical to the two previous claims numbered as claim 32.

Additionally, in the Office Action, the Examiner adjusted the numbering system used in the rejections to reflect the presence of two claims numbered as claim 32. However, this resulted in potential confusion with regard to the claim numbering. Accordingly, the Applicant teleconferenced with the Examiner to detail the present strategy of eliminating both claims numbered as 32 so that the claim number for the remaining claims would be unchanged. The strategy of eliminating both claims numbered as 32 appeared to be acceptable to the Examiner and has been implemented herein.

Consequently, all references to claim numbers below reflect the actual claim

Application No. 09/929,210
Attorney Docket No. 13031US01

numbers that underlie the Examiner's rejection, rather than the "offset" numbering that the Examiner used in the Office Action to compensate for the presence of two claims numbered as 32.

The Applicant thanks the Examiner for his patience.

Thus, claims 30-31, 34-39, 41-44, 45, 46, and new claim 51 (corresponding to the first of the two claims previously numbered as 32) would be allowable if rewritten in independent form.

By this Amendment, claims 29, 30, 40, 41, and 50 have been amended. Claims 30 and 41 have been amended to correct typographical errors.

Claims 29, 33, and 52 (corresponding to the second of the two claims previously numbered as 32) were rejected under 35 U.S.C. § 102(e) as being anticipated by Lindhorst-Ko et al., U.S. Pat. No. 6,853,641 ("Lindhorst-Ko").

Claims 40 and 47-50 were rejected under 35 U.S.C. § 102(e) as being anticipated by Raj et al., U.S. Pat. No. 6,628,649 ("Raj").

The Applicant now turns to the rejection of claims 29, 33, and 52 under 35 U.S.C. § 102(e) as being anticipated by Lindhorst-Ko. Lindhorst-Ko generally relates to the protection of traffic in a mesh network.

Application No. 09/929,210
Attorney Docket No. 13031US01

More specifically, in Lindhorst-Ko, as shown in Figure 1 and described beginning at column 3, line 17, a single mesh network includes a source node and a destination node. As shown in Figure 1, multiple paths between the source node and the destination node are available within the single network. As mentioned by the Examiner, Lindhorst-Ko teaches at column 3, lines 39-42, that copies of identical data may be transmitted along multiple paths inside the single network from the source node to the destination node.

However, Lindhorst-Ko only teaches transmission inside a single network, and does not teach transmission between multiple networks. More specifically, although Lindhorst-Ko teaches transmission between a source node and a destination node within a single network, Lindhorst-Ko does not teach transmission between a source node in a first network and a destination node in a second network, when the second network is distinct from the first network.

Independent claim 29 has been amended to include the limitation that the destination network is a network other than the source network. As discussed above, Lindhorst-Ko does not teach this limitation. Consequently, independent claim 29, and its respective dependent claims 33 and 52 are respectfully submitted to be allowable.

The Applicant now turns to the rejection of claims 40 and 47-50 under 35 U.S.C. § 102(e) as being anticipated by Raj. Raj teaches providing redundant routing in a switched network device. More specifically, as shown in Figure 6 and described

Application No. 09/929,210
Attorney Docket No. 13031US01

beginning at column 17, line 46, Raj teaches connection from a Label Edge Router (LER) 210 in a first network 212 to a LER 211 in a second network 213. The connection between networks includes several paths 230-1 to 230-N. Raj uses a rather confusing terminology and occasionally calls these paths "networks" in addition to "routes" even though they are really paths between the first network and the second network. The connection between the networks also passes through a Label Switch Router (LSR) 200. The LSR includes several Switch Control Mechanisms 201-1 to 201-N, that are also called Label Switch Controllers (LSCs). Each of the LSCs 201-1 to 201-N controls switching for one of the paths 201-1 to 201-N.

As noted at column 18, lines 15-20, the operation of Raj is described in the flowcharts of Figures 18 and 19. The flowcharts of Figures 18 and 19 are further described beginning at column 32, line 34. As described, Raj teaches a system having several paths between a first network and a second network. In the event that a failure is experienced along any one of the paths, an alternate path may be used instead. More specifically, if the path failure is a failure of a first LSC that switches a first path, a second LSC may be used to switch the traffic carried by the first path.

That is, as shown in Figure 18 at step 504, first a failure in the path transmitting the data is detected. Next, as recited at step 505, the routes between networks are analyzed and a new path is selected. Finally, at step 506-1, data is no longer sent using the failed path and the data instead is transmitted over another, functioning path.

As mentioned above, Raj occasionally calls the paths between networks

Application No. 09/929,210
Attorney Docket No. 13031US01

“networks,” but is really referring to the paths between networks. This becomes more clear with regard to the description for Figure 18. For example, at column 32, lines 43-45, Raj recites that:

“each LSC 201 is of the same type and is configured in the same manner to offer the same routes in parallel with one another.”

Further, at column 32, lines 49-52:

“Since there are N LSCs 201 in an LSR 200 which are all participating in the routing protocol, there will be at least N viable routes through the LSR to each destination.”

Then at column 33, lines 4-6:

“the LERs 210, 211 select one route from the plurality of parallel routes offered by the LSCs 201 to each destination.”

Thus, Raj teaches a system for providing multiple redundant paths from a first network to a second network. The paths are redundant because, in case of failure in any one path, one of the other paths may be employed. Duplicate copies of data are not transmitted on multiple paths.

Conversely, Raj does not teach receiving original data at a source network, forming a copy, and then transmitting both the original data and the copy of the data to a destination network using two different paths. In Raj, a path is simply selected and the data is transmitted. If the first path in Raj fails, then a second path is used.

Independent claims 40 and 50 recite creating a second data set comprising a copy of a first data set, transmitting the first data set through a first connection between a source network and a destination network and transmitting the second data set through a

Application No. 09/929,210
Attorney Docket No. 13031US01

second connection between the source and destination networks. As discussed above, although Raj teaches multiple paths between networks, Raj does not duplicate data at a source network and then send both the original and the duplicate data along different paths to the destination network. Consequently, independent claims 40 and 50, and their respective dependent claims 47-49, are respectfully submitted to be allowable.

Application No. 09/929,210
Attorney Docket No. 13031US01

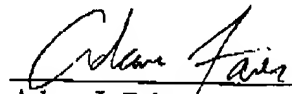
CONCLUSION

If the Examiner has any questions or the Applicant can be of any assistance, the Examiner is invited and encouraged to contact the Applicant at the number below.

The Commissioner is authorized to charge any necessary fees or credit any overpayment to the Deposit Account of McAndrews, Held & Malloy, Account No. 13-0017.

Respectfully submitted,

Date: January 31, 2006


Adam J. Faier
Registration No. 56,898

MCANDREWS, HELD & MALLOY, LTD.
500 West Madison Street, 34th Floor
Chicago, IL 60661

Telephone: (312) 775-8000
Facsimile: (312) 775-8100